

3. HOMELAND DEFENSE AND COMBATING TERRORISM

(Also see topics 1.15, 2.2, 2.7, 2.13, 2.18, 2.19, 2.24, 4.7, 4.25, 4.35, 4.36, 4.37, 5.12, 5.17, 5.22, 6.1, 6.2, 6.12, and 6.30)

3.1 Whither a National Strategy for Combating Terrorism? (Also see topic 3.30)

- Compare the National Strategy for Combating Terrorism (NSCT) and the DoD National Military Strategic Plan for the War on Terrorism (S) for consistency.
- Examine the roles and missions specified in these two documents: are they sufficient to guide the US CT effort?
- Review current authorities and responsibilities for the CT effort and recommend changes as appropriate.

Priority: 1

Key Terms: strategy, combating terrorism, interagency, National Strategy for Combating Terrorism (NSCT), National Military Strategic Plan for the War on Terrorism (NMSP-WOT) (S)

3.2 Do US government definitions of Homeland Defense (HD) and Homeland Security (HS), as reflected in current strategies, generate clear expectations regarding DoD and DHS respective roles and missions?

- Are there ambiguities and overlaps between DoD and DHS roles and missions?
- What is the operational effect; e.g., are there important overlaps and/or seams between HD and HS activities?
- Are steps needed to clarify these roles and missions? If so, make appropriate recommendations.

Priority: 1

Key Terms: homeland defense, homeland security, definitions, expectations, roles and missions, DoD, DHS

3.3 Conduct case study of overlaps/seams in HD and HS activities

- Pick a specific case, e.g., Navy v. the Coast Guard for maritime interdiction operations.
- What differences, if any, do overlaps make?
- Where problems exist, are operational solutions readily available?
- How can we best ensure unity of effort?

Priority: 1

Key Terms: case study, overlaps, seams

3.4 How best can US Northern Command integrate into the Homeland Security Presidential Directive (HSPD) mandated DHS National Bio-surveillance Integration System (NBIS)?

- Which computer systems/programs are adequate for integrating multiple, disparate data streams, both medical and non-medical?
- Which traditional and non-traditional data systems are vital to a functional NBIS?
- Which non-medical data streams might be medically relevant to NBIS?
- Which near-term surveillance technologies should be aggressively funded to enhance homeland defense and homeland security surveillance capabilities?
- How best to train medical intelligence analysts?

Priority: 1

Key Terms: Bio-surveillance, medical/veterinarian intelligence, Department of Homeland Security, Inter-agency effort, training, collection of homeland defense information, HHS

3.5 What is the best approach to broaden and deepen HD cooperation with Canada and Mexico? (Also see topic 3.57)

- Is NORAD a useful example or a potential problem?
- Should we stress a multinational approach or focus on bilateral relations?
- Can we effectively address HD concerns, for example, through the security agenda of the new US-Canada-Mexico Security and Prosperity Partnership?
- What other alternatives should be considered, e.g., build on NAFTA, OAS?

Priority: 1

Key Terms: NAFTA, Security and Prosperity Partnership, Canada, Mexico, NORAD

3.6 What is the threat posed to CONUS by the current flow of special interest aliens (SIA) across the national borders and what can USNORTHCOM do to counter the threat to our national security?

- What is the extent of the threat?
- What can USNORTHCOM do to assist in countering the threat?
- What are the legal issues associated with this question?
- How does this relate to SOCOM's role?

Priority: 1

Key Terms: N/NC J2, intelligence, threat

3.7 Should Canada and the United States pursue a treaty or agreement for bi-national Maritime Domain Awareness (MDA)? (Also see topics 3.8, 3.33)

- Canadian Forces (CF) and Other Government Agencies (OGA) such as Transport Canada have a responsibility for Maritime traffic as does the Department of Homeland Security (DHS), the US Coast Guard (USCG), and the US Navy (USN).

Should all stakeholders pursue a common operational picture of MDA for both defense and security missions?

- Assess Public Safety and Emergency Preparedness Canada (PSEPC), DHS, USCG, and USN technical capabilities with regards to maritime intelligence, surveillance, and reconnaissance (ISR).
- Assess PSEPC, DHS, USCG, and USN interoperability from a plans, process, and procedural perspective.
- Ascertain the Canadian public reaction to bi-national MDA initiatives.

Priority: 1

Key Terms: Canada, United States, Maritime Domain Awareness (MDA)

3.8 What are the potential issues and impacts of NORAD's adoption of maritime roles? (Also see topics 3.7, 3.33)

- What current practices and capabilities contribute to a maritime common operational picture (COP)?
- What are the bi-national and interagency maritime issues and concerns that must be addressed?
- How can NORAD best achieve bi-national and interagency maritime coordination and integration? What role can/should NORTHCOM play?
- What are the required NORAD national and bi-national maritime mission sets?
- What maritime capabilities and forces are required, and under what command and control arrangements?

Priority: 1

Key Terms: NORAD maritime; Canadian Naval Forces; Canadian NDHQ, US Navy, US Coast Guard; maritime weapons of mass destruction (WMD) detection; maritime surveillance, warning and information sharing

3.9 How can we improve interoperability in command, control, communications, and computer systems to support the Canadian and US transformation strategies, which include a focus upon greater interoperability and network centric warfare (NCW), to protect our vulnerabilities to our economies, security safety and environment (what information should be shared and can be shared)?

- Should secure and redundant communications be established between all Canadian Forces and USNORTHCOM operations centers?
- Should secure and redundant communications networks be established between Public Safety and Emergency Preparedness Canada (PSEPC), Department of Homeland Security (DHS), the Canadian Forces and US military?
- Determine what technical changes would enhance interoperability between Canadian and US active and reserve component forces for defense of North America. (i.e., Should specific bandwidths be reserved for Canada/United States (CANUS) operations in support of defense and civil support operations?)

- What non-technical protocols could be implemented to assist in military transformation from a bi-national perspective?

Priority: 1

Key Terms: Canada, United States, transformation, network centric warfare

3.10 Examine Federal v. State Responsibilities for Public Safety and Security

- Both the Federal Government and state governments are responsible for public safety and security
- Since 9/11, the line between the Federal Government's responsibilities and those of state governments is even more ill-defined
- The purpose of this study would be to
 - Examine Federal Government and State Government responsibilities, as defined by statute and regulation
 - Identify redundancies or seams between these responsibilities
 - Assess and compare Federal Government and State Government expenditures on public safety and security – focused on homeland security – in light of their statutory and regulatory responsibilities and identified redundancies and/or seams

Priority: 1

Key Terms: federal government, state government, public safety, roles and responsibilities, overlaps, seams

3.11 Should the DoD fund Civil Support Teams (CSTs)?

- Currently, by law, Weapons of Mass Destruction – Civil Support Teams are funded and certified by the Secretary of Defense and under the operational control of the governors of the states (Title 32, U.S.C.)
- In accordance with Sec. 1403 of the Bob Stump National Defense Authorization Act for Fiscal Year 2004 (PL 107-314), the number of WMD-CST will be 55, one for each State and Territory, including two for the state of California.
- The purpose of this study would be to:
 - Examine and assess the history of the establishment and expansion of the WMD-CST
 - Compare the costs, advantages, and disadvantages of continuing the status quo (DoD-funded with National Guard personnel) and a civilianized WMD-CST (Federally-funded – possibly funded with National Guard personnel) and a civilianized WMD-CST (Federally-funded – possibly by DHS – with civilian personnel)

Priority: 1

Key Terms: civil support teams (CST), national guard, military-civilian relationship, Title 32

3.12 What is the optimal configuration of state level and National Guard ops center to share information and situational awareness? (Also see topics 3.59, 3.60)

- What is the minimum requirement to efficiently communicate with DOD and interagency groups during crisis response?
- What systems are currently resident within each State's National Guard that can be used in this communications architecture?
- What is the cost vs. benefit of using one recommended system over another for existing communication gaps?
- What are the current capabilities, e.g. secure, non-secure and protected (voice, SIPR, NIPR, VTC, etc)?
- What is the anticipated footprint for teams and forces within each Ops Center for WMD events? (Include: CBRNE Enhanced Response Force Packages, Reaction Forces, Civil Support Teams, Public Affairs, JTF watchstanders and State Directors in the response)?
- What should be the command and control center's system configuration?

Priority: 1

Key Terms: NIPR, SIPRNET, National Guard, Crisis Response, Ops Center, SJFHQ-N

3.13 Intelligence Sharing (Also see topic 3.63)

- Interservice, intra-agency, interagency, international (e.g., Canada and Mexico, coalition partners)
- Assess post-9/11 intelligence reform – is it solving the problem?
- Releasability dates and overclassification.
- At the local level – sharing with law enforcement, medical personnel, etc.
- What could be some procedural solutions for better information sharing within and outside of the DoD?
- What are possible legal or cultural roadblocks with sharing information between agencies and the DoD that may impede senior level decision-making?
- How can we maintain assured, seamless, and interoperable voice, video, and data connections with coalition and interagency partners across security domains?

Priority: 1

Key Terms: intelligence sharing, interagency, intelligence reform, law enforcement, civil authorities, interoperability, data, security domains

3.14 Information sharing for warning and crisis management

- Examine the processes by which USG provides actionable intelligence in a policymaking, legal, and operational context to enhance the quality, timeliness, and quantity of decisions.
- Address how the organization of these communities influences decision making outcomes.

- Do recent insights from sociology and economics suggest a need for improvements in both process and organization for warning and crisis management?

Priority: 1

Key Terms: intelligence, information sharing, senior leaders, warning, organization, process

3.15 How do we measure how well NORTHCOM is performing its mission in deterring, detecting, preventing and defeating clandestine attacks?

- What are the primary alternative approaches to determine measures of effectiveness for the NORTHCOM mission areas of deterring, detecting, preventing, and defeating clandestine attacks?
- What lessons can be taken from other agencies/mission sets (e.g. Cold War deterrence, counter-drug operations; FBI counterterrorism)?
- How do other combatant commands assess their mission requirements and effectiveness in similar areas?

Priority: 1

Key Terms: Measures of effectiveness

3.16 What are the implications for DoD of mass-casualty terrorist attacks, including at casualty levels well beyond current planning?

- What will the US public and Congress expect of DoD?
- Develop specific scenarios and determine likely requirements for DoD support.
- Conduct survey of current DoD and other federal capabilities.
- If DoD is directed to provide maximum support, would DoD become the Lead Federal Agency (LFA)? What would be the likely effect on DoD capabilities for other operations?
- What are the implications for DoD planning and programming?
- What is a reasonable casualty threshold for planning?
- When and under what conditions should DoD transition its responsibilities to civil authorities?

Priority: 1

Key Terms: mass-casualty, planning, civil authorities, federal

3.17 What is the acceptable risk in conducting CBRNE remains recovery and processing? (Also see topics 3.46, 3.47)

- Explore difference in Military code of "leave no service member behind" (also seen in WTC post 9/11) vs. generally accepted Mortuary Affairs principle of "we will not risk the living for the dead."
- At what point is the value of recovering the dead greater than the health risk to mass fatality management personnel?

- How do we determine the level of health risk to mass fatality management personnel?
- How do political, social, cultural, religious, media, legal, medical and operational factors influence the decision process?

Priority: 1

Key Terms: Risk Assessment, mass fatality management, CBRNE remains recovery and processing

3.18 How do we integrate the DOD Family Assistance Centers (FAC) with the local community social, medical and nongovernmental organization assets?

- Is it best to keep separate military and civilian FAC's?
- What are the limitations of military personnel in a joint civilian/military operation?
- What are the funding issues?
- Is there equal service and treatment provided at the FAC's?
- Are there key differences between the civilian and military operations?
- Are there policy barriers?
- What is the best form for the post incident Family Assistance Center's for both the military and civilians?

Priority: 1

Key Terms: Family Assistance Centers, equal treatment, joint civilian/military operations

3.19 What are the most effective techniques and protocols for protecting hospitals against introducing CBRN contaminants during post attack operations?

- How effective are current hospital practices against potential contamination?
- Do all hospitals have some sort of planning for these events? What are the potential funding sources to support these plans?
- What are the best case practices for prevention of CBRN contamination in hospital environments?
- What are the potential risks to patient throughput by implementing various contamination avoidance Tactics, Techniques, and Procedures (TTPs)?
- What are the potential advanced detection technologies that can be employed to facilitate these protocols?

Priority: 1

Key Terms: Advanced CBRN detection technology, hospitals, post attack environment, patient throughput

3.20 What are the psychological effects of a terrorist attack?

- What habits or activities increase or decrease after a terrorist attack against civilian targets?

- Does the current exposure to violence in media make the US population less sensitive to these effects (increases/decreases in habits and activity)?
- What readily available sources of polling data reflect these trends?
- What factors allow people to maintain their baseline levels of faith and confidence in their government during periods of increased terrorist attacks? How to deal with issues regarding return to employment?
- How can we accomplish education as inoculation?
- What are the long term effects on the post-9/11 generation?
- Has DHS studied this issue?

Priority: 1

Key Terms: Terrorist effects, government, psychological, behavioral psychology

3.21 What is a useful framework for understanding and evaluation the chemical, biological, radiological, nuclear, and enhanced explosives (CBRNE) threat from a red force (adversary's) capabilities perspective?

- What are the differences between capabilities-based and threat-based assessments?
- Which type of assessment offers the best analysis in current/future operating environments?
- What are the key dimensions/attributes for measuring risk, and how should they be defined and measured?
- What research methodology would produce a confident assessment for planning purposes?
- How would/should a strategic risk assessment affect policy formulation and resource allocation?

Priority: 1

Key Terms: Capabilities-based

3.22 Identify and assess adversaries' concepts related to Nuclear, Biological & Chemical (NBC) and radiological weapons use.

- Select a region, nation, or non-state actor and describe its potential for employment of NBC or radiological weapons.
- Consider the political and military purposes of use or threat of use.
- Analyze an adversary's internal political-military dynamic (leadership), rhetoric or stated doctrine, and historical use (if any).
- How likely is an adversary to use NBC or radiological weapons or devices? How can the U.S. deter state and non-state actors from using such weapons? Are current counterproliferation operations an effective deterrent against the use of NBC devices by state or non-state actors?

Priority: 1

Key Terms: adversaries, NBC, radiological, U.S. response, historical use, adversarial use of NBC, deterrence, terrorism, state actor, non-state actor

3.23 What are the Centers of Gravity (COG) associated with homeland security (HLS) and homeland defense (HLD)?

- Does the United States have a National COG? What must the nation do to protect that COG?
- Does designating a National COG help synchronize the application of the instruments of National Power DIME (diplomatic, informational, military, economic)?
- What is/are the Military COG(s) associated with HLD?

Priority: 1

Key Terms: Center of gravity (COG), diplomatic, informational, military, economic (DIME), homeland security (HLS), homeland defense (HLD)

3.24 Explore and frame challenges associated with detection and defense against an unconventional attack on North America by low-altitude, low-speed, low-observable air threats.

- Explore and document current defense capabilities against low-altitude, low-speed, low-observable air threats.
- Propose capabilities required for NORAD/NORTHCOM to achieve detection, interception and destruction of low altitude air threats to the North America.
- Define radar system specificity for surveillance systems to detect and share information with defensive forces.
- Suggest approaches to improve data transfer (voice, target info) from Air Battle Managers (ABMs) to defensive forces.

Priority: 1

Key Terms: unconventional attack, low altitude air threat, cruise missiles, low-altitude, low-observable air threats; small aircraft threat; general aviation, visual flight rules (VFR); low, slow air threats

3.25 What are the threats and challenges associated with currently untracked air threats (general visual flight rules (VFR) aviation, low-altitude, low-observable vehicles), and what can NORAD (in conjunction with Federal partner agencies) do to address these threats and challenges?

- What is the extent of the detection/tracking problem?
- What threat payloads/strategies are of concern from these vehicles?
- What are the required NORAD capabilities to address the challenges?
- How can NORAD capitalize on work done by other Federal agencies in detection/tracking?
- What avenues of cooperation and synergies are available through inter-agency cooperation?

Priority: 1

Key Terms: Low-altitude, low-observable air threats; small aircraft threat; general aviation, visual flight rules (VFR); low, slow air threats

3.26 Demonstrations of military force have a proven utility. What might be the utility of demonstrations of cyber force as a crisis management tool?

- Should decision makers regard information operations as comprising an analogous capability as conventional or strategic military forces as tools for managing crises?
- What would distinguish displays, demonstrations, and uses of cyber force in actual practice?
- Is the distinction between offensive and defensive uses of force useful in this context?
- What considerations should decision makers bear in mind when considering displays, demonstrations, or uses of cyber force in the context of a crisis?
- What legal and ethical issues does this raise?

Priority: 1

Key Terms: cyber force, demonstration of force, information operations, crisis management, offense, defense, legal, ethical

3.27 What non-lethal weapons (NLW) capabilities does DOD require to successfully conduct assigned homeland defense (HLD) and civil support (CS) missions?

- What are the policy/legal implications of using NLW in the CONUS?
- What are the desired effects for employment of NLW at the strategic, operational and tactical levels?
- Rationale for using NLW.

Priority: 1

Key Terms: Non-lethal weapons (NLW)

3.28 How does bounded rationality contribute to failures of judgment during complex crises?

- How are limits on human judgment and cognitive ability manifested under stress?
- Is it possible to categorize failures in human judgment?
- What environmental variables influence decision making under stress?
- Do these variables change across different categories of failures in judgment?
- This research topic lends itself to a survey of the literature and/or case studies.

Priority: 1

Key Terms: crisis management, decision making, human judgment, bounded rationality

3.29 Can international crisis management and domestic incident management be integrated?

- Characterize international crisis and domestic incident management.
- Are these crises and incidents different in terms of objectives, outcomes, processes, and requirements?
- If so, can these objectives, outcomes, processes, and requirements be synthesized?

- What features might characterize a synthesized system for managing both international security crises and domestic incidents?

Priority: 1

Key Terms: crisis management, incident management, domestic, international

3.30 Integrating US CT strategy with US National Security Strategy (Also see topic 3.1)

- How can the elements of the US CT strategy be integrated with programs to address failed and failing states, reconstruction and stabilization, and development.
- How could these programs be better funded and managed?
- Do they have common objectives that would lend themselves to integration?
- Assess US interagency positions on an integrated approach.

Priority: 2

Key Terms: strategy, combating terrorism, interagency, development, failed states, reconstruction, stabilization

3.31 Develop a long-term DoD vision statement for HD/HS.

- What are the key challenges ahead, with DoD both in its lead role for HD and a supporting role for HS?
- What are the long-term objectives for HD and HS?
- Can we develop a transformational roadmap to meet these objectives?
- What should the end state look like?

Priority: 2

Key Terms: vision statement, challenges, roadmap, transformation

3.32 How can we improve the interconnectivity of United States and international efforts to reduce the WMD/E threat?

- What are the Federal and international programs intended to address this threat?
- What are the relative strengths of these programs?
- Where do these programs still leave the US most vulnerable (program weaknesses/gaps)?
- What steps can be taken to improve the coordination and synergies between these programs?
- What new programs/approaches will best plug the existing gaps?

Priority: 2

Key Terms: WMD/E defense, interagency coordination, international cooperation

3.33 What are the Maritime Security Policy Issues for NORAD/USNORTHCOM? (Also see topics 3.7, 3.8)

- How can a situation awareness capability similar to our current air picture be created?
- How can our sea lanes be secured?
- Is requiring a sea “flight plan” a suitable solution?
- What are the implications of this approach and what are better alternatives?
- How can information-sharing be promoted in the maritime realm?

Priority: 2

Key Terms: maritime security, NORAD, NORTHCOM, sea lanes, air picture, situation awareness

3.34 How can we best encourage federal, state and local governments to participate more fully in appropriate exercises? (See topic 2.24)

- Identify the exercises being conducted.
- Who are the key players and at what capacity/frequency can they be expected to participate?
- What state and local players should be engaged most frequently and what is the priority by state?
- What funding is available and how can it be ‘fenced’ for state (all levels) participation in a national exercise program?
- What is required for USNORTHCOM implementation (i.e. budget, scheduling, policy, training, non-DOD coordination, etc.)?
- Assist state and local governments in deconflicting multiple exercises.
- What is the most effective means for collecting and incorporating non-DoD input for exercise MSELs?

Priority: 2

Key Terms: exercises, interagency, coordination, participation, state government, local government, NORTHCOM, MSELs

3.35 What is the appropriate NORTHCOM involvement in federal, state, tribal, and local government exercises?

- Identify the exercises being conducted.
- Who are the key players and at what capacity/frequency can they be expected to participate?
- What state and local players should be engaged most frequently and what is the priority by state?
- What funding is available and how can it be 'fenced' for state (all levels) participation in a national exercise program?
- What is required for USNORTHCOM implementation (i.e. budget, scheduling, policy, training, non-DOD coordination etc.)?
- Assist state and local governments in de-conflicting multiples exercises.

- What is the most effective means for collecting and incorporating non-DOD input for exercise Master Scenario Event Lists (MSELs)?
- How can we best disseminate results of exercises (lessons learned, classification)?

Priority: 2

Key Terms: Exercises, interagency, coordination, participation

3.36 What are the optimum education and training curriculum and courses for HLD and Defense Support to Civil Authorities (DSCA)?

- Survey and compare and Homeland Defense/Homeland Security curricula
- What are the competencies and best practices for HLD/HLS?
- What are the standards for curriculum content for the discipline of HLD and DSCA?
- How can HLD and DSCA curriculum content best be identified?
- What research methodologies and approaches can be used to refine HLD and DSCA curriculum content?
- How should HLD and DSCA courses be structured?
- What is the appropriate balance of HLD and DSCA courses?
- How are the curriculum, instruction and assessment aspects of HLD and DSCA course best served?

Priority: 2

Key Terms: Education and training, curriculum, instruction, HLD and Military Assistance to Civil Authorities (MACA) subject matter content

3.37 What role should NORAD/NORTHCOM play in developing an integrated Federal, state, and local homeland security/homeland defense training infrastructure to support individual and collective training?

- How can DOD's training transformation efforts be leveraged for support?
- How can DHS' HSPD-8 implementation efforts be leveraged for support?
- How should NORAD/NORTHCOMs Homeland Security/Homeland Defense Education Consortium be integrated with DHS' National Domestic Preparedness Consortium?

Priority: 2

Key Terms: Individual education, collective training, training infrastructure

3.38 How can NORAD/NORTHCOM quantify the thresholds or trigger points where military support is required or necessary for civil support to local and state first responders?

- At what level should these thresholds be established (local, city, state, region)?
- Each city, state, or region may be different in its ability to respond to varying types of emergencies, and thus may not need military support to the same degree as other

cities, states, or regions. As a result, should thresholds be established for each unique entity?

- What are the legal ramifications of establishing trigger points?
- Should these trigger points be established for information and coordination purposed only?

Priority: 2

Key Terms: Trigger points, quantitative thresholds, civil support

3.39 How can USNORTHCOM effectively, efficiently, and legally develop and implement comprehensive collection of homeland defense and civil support threat information from relevant private and public sector sources consistent with US privacy law; and develop automated tools to improve data analysis and management, systematically track large amounts of data, and to detect, fuse, and analyze aberrant patterns of activity, consistent with US privacy protections?

- What are relevant private sector sources? How can they be included in the development process?
- How would the legality of the collection effort be accomplished?
- What is the definition of "threat" information?
- What NORTHCOM policy can be developed to address the collection effort?

Priority: 2

Key Terms: NC collection, public/private partnerships, NBIS

3.40 Examine the role of strategic communications in the war on terrorism. (Also see topic 3.62)

- Assess strategic communications and public diplomacy efforts to date.
- Examine interagency roles and responsibilities in this area (STRATCOM, SOCOM, Department of State, etc.).
- What should be DoD's role in public diplomacy?
- How can the U.S. best engage and win the war of ideas? How can the United States engage the Al Qaeda narrative, and how can the U.S. apply the different instruments of national power not just to combat the narrative but to engage it in a way that discredits it, while bolstering the U.S. message?
- This topic may lend itself to case studies.
- Consider the Sep 04 DSB Report on Strategic Communication.

Priority: 2

Key Terms: strategic communications, public diplomacy, war on terrorism, case study, al Qaeda

3.41 Addressing the Underlying Conditions that Foster Terrorism

- Chapter 12 of the 9/11 Report addressed the underlying conditions of terrorism, but a priority effort to deal with them has not been undertaken.
- Does the report present a comprehensive listing of underlying conditions?
- Do they vary by country/region? How?
- What should be the priorities for addressing these conditions?
- How should the interagency community coordinate US efforts to address the underlying conditions at the regional level?
- This research topic lends itself to a case-study approach.

Priority: 2

Key Terms: regional, underlying conditions, 9/11 Report, interagency

3.42 Examine homeland security/defense efforts to prevent and deal with non-catastrophic attacks.

- What role should the military play?
- How should the U.S. prepare for a series of attacks that do not cause massive casualties? What are the implications for budgets and other resources should the U.S. need to repeatedly respond?

Priority: 2

Key Terms: WMD, terrorism, homeland security, homeland defense, NORTHCOM, MACA

3.43 Examine how recent terrorist attacks affected regional security cooperation.

- How has the perceived need for greater protection against terrorism affected border controls and other aspects of national and regional security?
- How have differing perceptions of the threat from terrorism affected regional security cooperation?
- Explore the role of regional security organizations in fighting the war on terrorism.

Priority: 2

Key Terms: globalization, terrorism, nation building, multilateral organizations, failed states, regional stability, soft power

3.44 What key Theater Security Cooperation (TSC) initiatives are required to reduce vulnerabilities and enhance the overall HLD posture of the US?

- Can the Global War on Terrorism (GWOT) be effectively prosecuted in all areas of the NC Area of Responsibility (AOR)? What shortfalls need to be overcome through TSC initiatives?
- What are the special challenges regarding Mexico that must be addressed through an interagency effort?

- What are the strategic issues associated with Canadian participation in regional defense?

Priority: 2

Key Terms: TSC, GWOT, Canada, Mexico

3.45 Can an effective common definition of decontamination between military and civilian standards be established? (Also see topic 2.19)

- What are the current definitions of decontamination between civilian and military policy for CBRNE events?
- What are the policy differences between local, state, and federal?
- Can best practices be identified between all organizations?
- What are the policy barriers towards creating common standards?
- What are the benefits or risks associated with creation of common standards?

Priority: 2

Key Terms: Decontamination, NFPA, DOD, DOE, OSHA

3.46 What is the most effective method to rapidly integrate Federal Interagency Mortuary Affairs (MA) assets with local responder MA organizations? (Also see topics 3.17, 3.47)

- How do we map comparative units/Individuals to effectively integrate military capabilities into federal and local units with MA missions?
- What is the best methodology and/or metrics to provide comparisons between military, federal and local MA capabilities (e.g. DOTLMP-F)? Provided comparisons for MA using this methodology.
- Does the current inability to accurately map capabilities result in inefficiencies with sourcing military support? If so, then to what extent? Are there recommendations for more efficient structures to enable better integration capabilities?
- Can the use of MA trained augmentees or modularized MA units provide more effective support?
- Is additional policy required to link NRP level MA guidance further with local and interagency efforts?

Priority: 2

Key Terms: Integration, capability mapping, DOTMLP-F, mortuary affairs, efficient employment

3.47 What is the USNORTHCOM Combatant Commander's intent on the handling of deceased military members from an incident? (Also see topics 3.17, 3.46)

- How will the different jurisdictional issues shape that intent?
- Who will be identified as military?

- If there is different treatment given to military deceased, what is the public perception and how does it affect public trust?
- If states release military remains the:
 - what special packaging is needed to get them to Dover Port Mortuary?
 - what is the logistics footprint to execute?
 - would we need the creation of special Armed Forces Medical Examiner site teams for all the bases with dead?
- If separate procedures for the military/civilians are conducted what is the impact on the ability of the military to the civil support mission?

Priority: 2

Key Terms: Mortuary affairs, public trust, civilian casualty procedures, military fatalities

3.48 Assess potential challenges for civil-military relations from DoD's growing involvement in HD and HS activities.

- Does DoD's growing domestic role pose a potential threat to US civil liberties?
 - What problems could arise, for example, if USNORTHCOM is directed to take the lead at a time of national emergency?
- Are current constraints on DoD's role adequate to preserve the principle of civilian control of the military?
- What measures, if any, are needed to ensure that our freedoms are protected?

Priority: 2

Key Terms: civil-military relations, civil liberties, civilian control of military

3.49 Examine the strategic implications of human security issues.

- Using a regional case study, examine the impact of human security issues (e.g., disease, poverty, individual rights) on regional stability.
- Does the military have a role in preventing or mitigating the effects of human security challenges?
- How do human security issues affect terrorist recruiting, sympathy for terrorist causes, and possible safe havens?

Priority: 2

Key Terms: human security, terrorism, human rights, safe havens, terrorist recruiting

3.50 How do social networks respond and adapt to complex, unanticipated events?

- Is it possible to formulate a useful taxonomy of varieties of shocks to social networks?
- What models exist to understand the impact of these shocks on social networks?
- What characteristics of social networks permit or constrain systemic adaptation to shocks?
- By what means can these characteristics be manipulated in advance?

- What are the priorities for further research in this area?
- Consider the forthcoming literature from the Naval Postgraduate School.

Priority: 2

Key Terms: taxonomy, social networks, unanticipated events, social shock

3.51 How does NORAD/NORTHCOM plan to ensure continuity of operations in the event of emergency, catastrophic failures, or loss of ability to operate from Building 2 or Cheyenne Mountain Air Force Station (CMAFS)? Not only the traditional NORAD missions, but missions related to HLD and Military Assistance to Civil Authorities (MACA) would be critical in an emergency (such as 9/11 or even severe weather), but the dual locations and dual-hatted nature of the staff could bring unique challenges.

- What key mission must continue?
- What are the critical needs for communications, space, etc?
- What approaches have other combatant commands used to address this issue?
- What plans already exist?
- How can N/NC provide HLD and MACA support when they are themselves displaced?

Priority: 2

Key Terms: Continuity of operations (COOP)

3.52 Can a common standard be achieved between military and civilian personal protective equipment?

- What are the differences between civilian/OSHA and military MOPP equipment?
- What are the statutory or policy differences between OSHA and DOD?
- Are there valid cases for differing requirements other than superficial (e.g. camouflage colors for military use, etc)?
- Is the military working with civilian agencies to "type test" their equipment for certification to provide comparative levels of protection (MOPP IV vs. OSHA level C)?

Priority: 2

Key Terms: Personal protection equipment, OSHA, DOD, NFPA

3.53 What are the most effective tactics, techniques, and procedures (TTPs) to assure that first responders are not entering a CBRN contaminated area unprotected?

- What levels of training are currently given to first responders at local, county, state and federal levels?
- Are there areas for further improvement and standardization of this training (development of best practices)?

- What is the commonly recognized best case CBRN detection equipment set for first responders?
- What are the potential advanced CBRN detective technologies that can be employed by first responders?
- What are the legal ramifications for these policies?

Priority: 2

Key Terms: Advanced CBRN detection technologies, first responders, contaminated areas

3.54 How can NORAD decouple its classic mission set from the asymmetric threat in order to react in a more flexible manner to asymmetric threats?

- What needs to be changed to react to a new-age threat without having to change DEFCON to acquire assets and respond?

Priority: 3

Key Terms: Asymmetric threats, DEFCON, NORAD

3.55 What are DOD's and NORTHCOM's roles in critical infrastructure protection (CIP) and protecting the defense industrial base (DIB)?

- How does DOD plan for CIP when the potential target set is huge?
- How should the DIB be defined? How is/should the CIP be prioritized?
- What are/should be NORTHCOM's role in protecting the DIB? CIP?
- What capabilities/force packages are required for protecting and defending CIP and DIB?

Priority: 3

Key Terms: Critical infrastructure, CIP, defense industrial base, DIB

3.56 How can NORAD/NORTHCOM effectively communicate with the various lead Federal agencies acting under the National Response Plan or in the event of a national disaster?

- What methods of communication are used by Federal agencies and how interoperable are they?
- How can dissimilar communication systems be integrated for effective HLD/HLS communications?
- What should be the primary uses of wireless communications for emergency responders?
- How can NORAD/USNORTHCOM effectively utilize non-government amateur communication systems to support national communications in the event of a national disaster?
- What approaches have other homeland security entities used to resolve the integration of interagency communications?

- How can NORAD/USNORTHCOM ensure that it utilizes the SIPRNET only when appropriate?
 - What are the implications of over classification?
 - Does the extent of over classification that does occur damage the efforts of the interagency? Coalition cooperation?
 - By what means might over classification of material be reduced?
- What are the current legal and policy barriers to information sharing?

Priority: 3

Key Terms: Communications, homeland security, national disaster, wireless, communications integration, Federal government interagency cooperation, NORAD/USNORTHCOM

3.57 Due to the interconnectedness of our economies, should Canada and the United States pursue a bi-national treaty or agreement for civil support? (Also see topic 3.5)

- Public Safety and Emergency Preparedness Canada (PSEPC) and the Department of Homeland Security (DHS) are responsible for civil support in Canada and the United States respectively; should they create a common Canada/United States (CANUS) response plan rather than two separate plans with dissimilar technology?
- Assess PSEPC and DHS ability to do their missions for an event on the CANUS border.
- Determine whether the Canadian Forces and US military should be fully interoperable for civil support missions in support of PSEPC and DHS.
- Ascertain the Canadian public reaction to a closer military cooperation between PSEPC, DHS, Canadian Forces and the US military.

Priority: 3

Key Terms: Canada, United States, civil support

3.58 How can NORAD improve its interagency coordination with the FAA and DHS with regard to identifying and cataloging Tracks of Interest and Temporary Flight Restriction (TFR) violators?

- What systems can be used to enhance identification and improve information flow across agencies?
- To what extent can this information be shared with outside agencies?
- To what extent can this information be shared with the Canadian Government or Canadian counterparts?
- Can wide-area distributed and controlled-access data bases be applied to this problem?

Priority: 3

Key Terms: Unclassified COP, ADNET, GCCS, AMOC, multi-domain

3.59 What factors need to be considered to determine the best mix of Active Component, National Guard (NG) and Reserve capabilities to accomplish HLD and CS missions within the USNORTHCOM AOR? (Also see topic 3.12)

- What are the current NC force requirements/timing and identified shortfalls that might require use of NG and Reserve capabilities?
- Could NG and/or Reserve forces effectively supplement current Active Component forces to fulfill identified shortfalls? What are the cost/benefit implications?
- What are the legal or implications (e.g. mobilization) and changes required to effectively integrate NG and Reserve forces?

Priority: 3 (most appropriate for PME institutions)

Key Terms: National Guard, Reserve Forces, HLD, civil support

3.60 How can NORTHCOM leverage the unique status of the National Guard (NG) to improve NORTHCOM's readiness and response for the homeland defense mission? (Also see topic 3.12)

- Does the NATO military arrangement (coalition warfare) offer organizational opportunities for consideration to apply to the relationship of NORTHCOM and NG?
- Should NORTHCOM focus more on a unity of leadership of the homeland defense effort as opposed to a unity of command?
- How can NORTHCOM further exploit and build on the dual-hatting arrangement provided under the recent change to Title 32, Section 325 to improve on its readiness and response?
- What legislative changes are required to strengthen the role of the NG when under the command and control of the governor by in support of NORTHCOM?
- Should the purpose for the NG bureau "channel of communications between the Departments of the Army and Air Force" be expanded to include NORTHCOM and others? Is a change in law required or desired?
- How can NG Counter Drug assets be leveraged to best support the homeland defense mission?

Priority: 3 (most appropriate for PME institutions)

Key Terms: National Guard, homeland defense, Title 32

3.61 How does the US Government convey a coordinated message to inform the public to deal with HLS/HLD situations?

- How do we best integrate public diplomacy, public affairs, and the media?
- How does the DOD synchronize with DHS and other agencies?
- How should DOD train and educate its personnel to accomplish synchronization?

Priority: 3

Key Terms: Strategic communications, diplomacy, public affairs, information operations (IO)

3.62 How can NORAD/USNORTHCOM ensure networks are protected against malicious code, and vulnerabilities resulting from software design flaws and improper implementation? (Also see topic 3.40)

- How can vulnerabilities be identified, and their effects analyzed in a timely and realistic way?
- How can dissemination, receipt, acknowledgement and processing of vulnerability alerts and bulletins be performed in a timely and risk-appropriate way?
- How can instances of these vulnerabilities be discovered in systems and network devices?
- How can the operational impacts of vulnerability remediation be determined, and if those impacts are unacceptable, how can risk assessment and mitigation be performed in a timely and effective way?
- How can remediation of vulnerabilities through the application of corrective measures be performed effectively and in a timely way?
- How can successful remediation be verified, and how can compliance status with respect to alerts and bulletins be assessed and reported?
- What approaches have other combatant commands used to solve this issue?

Priority: 3

Key Terms: Vulnerability management, patch management, J6

3.63 How can NORAD/USNORTHCOM automatically access and/or transfer data between two or more differing security domains and ensure security (and prevent spillage)? (Also see topic 3.13)

- How can the DOD more effectively use existing and emerging cross domain solutions? How can solutions be better integrated with such IA and CND capabilities as vulnerability management, situational awareness, and accountability services (including I&A and non-repudiation)?
- How can cross domain solutions keep pace with the development of other information technologies key to net-centric operations? What capabilities should cross domain solutions provide to support the evolving GIG?
- How can cross domain solutions more effectively support agile operations? What capabilities should cross domain solutions provide that enable dynamic policy definition, policy enforcement, and connectivity?
- How can security spills be detected and contained? What tools can be implemented to prevent spillage?
- How can the extent of a spill be determined? How can devices on which unauthorized information is stored be identified, and how can unauthorized users be identified?
- How can affected devices and storage media be sanitized with minimum operational impact?

Priority: 3

Key Terms: Cross domain solutions, data transfer, security domains, J1